i"	Application No.	Applicant(s)	
	10/604,262	CHEN ET AL.	
Notice of Allowability	Examin r	Art Unit	
	Raquel Y. Gordon	2853	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this apport or other appropriate communication GHTS. This application is subject to	olication. If not includ will be mailed in due	ed course. THIS
1. X This communication is responsive to application filed 7/7/20	<u>03</u> .		
2. The allowed claim(s) is/are 1-18.			
3. The drawings filed on <u>07 July 2003</u> are accepted by the Ex	aminer.		
 4. Acknowledgment is made of a claim for foreign priority unally all b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	been received. been received in Application No		ition from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached EXAMINER	'S AMENDMENT or N	
_		don is denoterit.	
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") mus(a) ☐ including changes required by the Notice of Draftspers		948) attached	
1) hereto or 2) to Paper No./Mail Date		o to, attaonoa	
(b) including changes required by the attached Examiner's Paper No./Mail Date		Office action of	
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in ti	.84(c)) should be written on the drawir he header according to 37 CFR 1.121(ngs in the front (not the	e back) of
7. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL r FOR THE DEPOSIT OF BIOLOGIC	nust be submitted. AL MATERIAL.	Note the
Attachment(s)	5 Notice of Informal D	latant Application /DT	O 152)
 Notice of References Cited (PTO-892) Dotice of Draftperson's Patent Drawing Review (PTO-948) 	5. ☐ Notice of Informal P6. ☐ Interview Summary	` '	0-132)
2. [] Notice of Draitperson's Patent Drawing Neview (F 10-946)	Paper No./Mail Dat	te	
3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 7/7/2003	08), 7. ☐ Examiner's Amendr	ment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's Stateme	ent of Reasons for All	owance
of Biological Material	9. [] Other	PRIMARY EXAMIN	

Application/Control Number: 10/604,262

Art Unit: 2853

Reasons For Allowance

The following is an examiner's statement of reasons for allowance. The instant invention is directed to first and second heating resistor elements for heating ink supplied to a bubble jet printhead. Further, when the second heating element for heating the ink is measured to be less than or equal to a predetermined level, the second heating element is caused to short circuit. Further, the ink volume detecting circuit connected to the second heating element operates based on a condition of the second heating element.

While Cornell (US006575563B1) teach a similar invention, Cornell teaches providing a power density per unit volume of each heat resistor in order to provide a sufficient velocity to ejected ink droplets and for optimal printing. Cornell falls short of measuing the remaining volume of ink based an a condition of a second heating resistor, as claimed. Further, Cornell does not discloses short circuiting a second heating element when, based on a detected condition, the volume of ink measured is less than or equal to a predetermined level.

An exhaustive updated search has proven to find no other relevant prior art to teach the claimed combination, as recited. Hence, the claims are deemed to be allowable over the art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably Art Unit: 2853

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Raquel Y. Gordon, whose telephone number is (571) 272-2145. The Examiner can normally be reached on M Tu Th and F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. A fax number is available upon request.

Any inquiry of a general nature or relating to the status of this application or proceeding may be directed to the Examiner or Supervisor.

Raguel Y Gordon Primary Examiner Art Unit 2853 June 10, 2004

RAQUEL GORDON PRIMARY EXAMINER